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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,841	03/19/2001	Stephen A. Schwab	002.0144.01	1426

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EXAMINER

EDELMAN, BRADLEY E

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 09/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/812,841

Applicant(s)

SCHWAB, STEPHEN A.

Examiner

Bradley Edelman

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-30 is/are allowed.
- 6) ☒ Claim(s) 1-3,5-8,10 and 11 is/are rejected.
- 7) ☒ Claim(s) 4 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a first Office action on the merits of this application. Claims 1-30 are presented for examination.

Drawings

1. The drawings are objected to because they fail to provide adequate labels or legends to describe the numbers and letters present in figures 1-6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In considering claims 2 and 7, both of these claims describe a "concast path." This term is unclear. The specification describes a concast tree that is traversed to disseminate and manipulate validation rule parameters, but does not clearly explain what would constitute a concast *path*. Thus, the term as used in the claims is ambiguous.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 6, 8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harsham et al. (U.S. Patent No. 6,041,347, "Harsham"), in view of Ahearn et al. (U.S. Patent No. 5,926,463, hereinafter "Ahearn").

In considering claim 1, Harsham discloses a system for dynamically configuring parameterized validation rules in a distributed computing environment, comprising:

a plurality of packet validation devices ("machine 1, machine 2"), each situated within the distributed computing environment at packet routing points and validating packet traffic using parameterized validation rules (col. 4, line 5, 15-16, "switches, routers, gateways..."; col. 8, lines 56-60, "filters");

a network connection between the devices and a root node, wherein validation rules are retrieved and processed from packet validation devices (col. 6, lines 15-16, "the module 92 may read a configuration file from a network device") ; and

a root node interfaced to the network, from which validation rule parameters are retrieved and disseminated to each of the packet validation devices (col. 6, lines 12-14, "a configuration application module 92 receives the configuration file 90 and transmits it to each of the network devices...").

However, Harsham does not discuss the particulars of the network connection, and therefore fails to disclose that the root node and the devices are connected through a plurality of hierarchical tree nodes structured into a plurality of tiered layers with each tree node interfaced to another tree node, such that the lowermost layer of tree nodes interfaces to the devices and the uppermost layer of tree nodes interfaces to the root node. Nonetheless, such a hierarchical tree node structure to connect devices on a network are well known, as evidenced by Ahearn. In a similar art, Ahearn discloses a system for managing routers and other network devices on a network, wherein a manager is connected to an uppermost tree node (Fig. 4, switch 5 at the root of the tree), and the devices (Fig. 4, switch 5 at the bottom of tree) are connected to lowermost tree nodes in the network (Fig. 4, switch 5 in the middle of tree). Given the

teaching of Ahearn, a person having ordinary skill in the art would have readily recognized the desirability and advantages of using a tree structure to connect the root node and the device nodes in the system taught by Harsham, because the Internet often uses such tree structures, and such tree structures are a fast and simple way to disseminate information on a network. Therefore, it would have been obvious to use the tree nodes taught by Ahearn to connect the devices and root node taught by Harsham.

In considering claim 3, the system taught by Harsham combined with a tree structure taught by Ahearn further teaches a dissemination path interconnecting the root node with each packet validation device via a interconnection reserved for validation rule parameter exchange (i.e. the root node will send validation rule parameters via particular set paths to reach the devices).

In considering claim 5, Harsham further discloses that validation rule parameters each comprise a source network address and subnet mask, source port, destination network address and subnet mask, destination port, and one or more network protocol identifiers (col. 8, lines 64-67).

In considering claims 6, 8, and 10, these claims present a method including the same steps as claims 1, 3, and 5 respectively, and are thus rejected for the same reasons.

In considering claim 11, Harsham further discloses a computer readable storage medium holding code for performing the method of claim 6 (Abstract).

Allowable Subject Matter

4. Claims 12-30 are allowed.
5. Claims 4 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 12-30, the prior art of record fails to disclose or render obvious the claimed steps of collecting, coalescing, and disseminating rule parameters using the concast tree and tree node system as claimed.

Regarding claims 4 and 9, the prior art of record fails to disclose or render obvious the system and method of claims 1 and 6, wherein the tree nodes each execute a filter to remove the validation rule parameters as claimed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is 703-306-3041. The examiner can normally be reached from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bradley Edelman

BE
September 13, 2004